Year Plan to make it more effective. Action has been initiated for seeking approval of the proposal from the competent authority.

Inputs for power generation

4103. SHRI VIJAY J. DARDA:
SHRIMATI MOHSINHA KIDWAI:

Will the Minister of POWER be pleased to state:

(a) what is the break-up of electricity being produced through various input fuels like hydro, thermal, nuclear, solar, etc.;

(b) whether utilization of thorium and bio-fuels would be considered for significant production of electricity due to gradual depletion of fossil and hydro fuels; and

(c) whether public-private joint efforts are on the anvil, so as to meet full power requirement by the end of Eleventh Five Year Plan?

THE MINISTER OF STATE IN THE MINISTRY OF POWER (SHRI JAIRAM RAMESH): (a) During the Financial year 2007-08, the quantum of power generation in the country from Coal/Lignite, Gas/Naphtha, Diesel, Multi-fuel based thermal power plants, Hydel energy and atomic energy is given below:

Category	Monitored Capacity (As on 1.4.2008)	Gross Generation
	(MW)	(Million Unit)
Coal/Lginite	74433.7	476686.5
Gas/Naphtha	13945.9	68779.0
Diesel	1073.3	3303.8
Multi-fuel	1430	10045.8
Hydro	37082.3	123569.7
Nuclear	4120.0	16775.7
All India Total	132085.2	704450.8*

*Includes Import of 5,290 MU energy from Bhutan

In addition, the total grid-interactive renewable power generation capacity in the country is 12,403 MW as on 31.3.2008, comprising 8757 MW wind power, 2181 MW small hydropower, 1643 MW bio-power.

(b) According to the Department of Atomic Energy, the thorium resources in the country are vast, and have a huge potential for electricity generation in the long-term. India's three-stage, nuclear power programme is being implemented for utilization of thorium for electricity generation. The three stages of the programme have fuel cycle linkages and have to be thus gone through sequentially.

According to Ministry of New & Renewable Energy, Bio-fuels particularly, bio-ethanol and bio-diesel are presently being considered as potential fuels for supplementing/substituting petro based gasoline and diesel respectively in the automotive sector.

(c) In order to meet full power requirement by the end of Eleventh Five Year Plan, a Joint Venture Agreement has been signed between NTPC Ltd. and BHEL to take up work related to Engieering, Procurement and Construction (EPC) for power plants and other infrastructure projects. NTPC Ltd. has also entered into an Memorandum of Understanding with

Bharat Forge Limited to promote a joint venture company initially to take up the manufacture of castings, forgings, fittings and high pressure pipings.

M/s. L&T has already formed a Joint Venture Company with MHI, Japan for manufacture of supercritical steam generator and steam turbine generators in India. Certain other manufacturers *viz.*, M/s. Skoda power, India Ansaldo, Italy Cethar Vessels, India are also expressed interest for setting up for manufacturing facilities for boiler and turbine generators in the country.

Utilization of funds for power generation

4104. SHRIMATI MOHSINA KIDWAI: Will the Minister of POWER be pleased to state:

(a) whether Government has formulated plans for utilization of allocation of Rs. 28,000 crore for power generation during Eleventh Five Year Plan;

(b) whether new power plants are proposed to be set up, or there would be augmentation of the existing plants also;

(c) if so, what is the break-up of new plants amongst different States; and

(d) whether power would be available as per demand after end of the Eleventh Five Year Plan?

THE MINISTER OF STATE IN THE MINISTRY OF POWER (SHRI JAIRAM RAMESH): (a) According to the information received from Planning Commission, for the Eleventh Plan, an outlay of Rs. 309233.38 crore (comprising of Rs. 278781.47 crore as Internal and Extra Budgetary Resources (IEBR) and Rs. 30451.91 crore as Gross Budgetary Support), has been provided for Ministry of Power. In the State Sector, an outlay of Rs. 225384.65 crore has been proposed for energy (including power) for the Eleventh Plan.

(b) and (c) The capacity addition programme envisaged for the Eleventh Plan, includes green-field projects as well as expansion projects. In the State and Private Sector, a capacity of 25741 MW is envisaged from green-field Projects and 15905.4 MW from expansion projects. The State-wise break up of green-field and expansion projects to be set up in Eleventh Plan in State and Private Sector is given in the Statement (*See* below).

(d) Central Electricity Authority has intimated that with a capacity addition of over 78500 MW envisaged through thermal, hydro and nuclear segments and 14000 MW through other renewables, the demand for power in the country as a whole is likely to be met by the terminal year of Eleventh Plan.

Statement

State-wise break up of green-field and expansion projects to be set up in Eleventh Plan in State and Private Sector

(*In Mega Watt*)

Name of State	Green-field projects	Expansion Projects	Total
1	2	3	4
Haryana	1800	0	1800
Himachal Pradesh	1672	0	1672
Jammu & Kashmir	450	0	450